

GREAT LAKES TECHNOCRAT

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JULY-AUGUST, 1943

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GREAT LAKES TECHNOCRAT

JULY-AUGUST, 1943 ★ VOL. II ★ NO. 5 ★ WHOLE NO. 62

★ Illustrating the Futility of Price System Methods of Operation; Interpreting the Trend of Events from the Social Aspect of Science; and Presenting the Specifications for Total Victory in America's War Against Fascism. ★

— THE STAFF —

Managing Editor R. B. Langan Art and Research John Beverleigh
Assistant Editor Alice Langan Secretary-Treasurer Lois Beverleigh

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Technocracy Speaks About Total War

by W. E. Walter

There is one attitude of mind against which it is impossible to contend, that is condemnation before investigation.

TECHNOCRACY Inc. is a non-political, non-sectarian, non-profit membership Organization of 100 per cent American citizens. For over a quarter of a century the only valid basis for authority recognized by Technocracy has been the cold hard facts in the physical, fundamental world of things and events.

Technocracy's approach is the very opposite to any and all philosophies of social control and has nothing in common with any other approach to the social order or any other organization either in America or elsewhere. It is objective in its viewpoint, not subjective.

So unique is this body of thought that it cannot be compared, classified or pigeonholed with any other approach to the social question. Nor can it be explained in the terminology of other organizations. In order to be understood, it must be studied. Its foundations are known, not believed, and its practices are based on pertinent, present day facts, rather than traditions of past social habits and beliefs and acquired prejudices.

On the basis of a scientific approach to the social order Technocracy has built up an Organization that is com-

petent to act in the American crisis. The crisis is here and the action has started Technocracy's Victory Program of Total Conscription of Men, Machines, Materiel and Money, with National Service from All and Profits to None.

For the first time in history we are confronted with the necessity of Total War to preserve our civilization. The preservation of everything we have depends upon our ability to preserve our social mechanism. I quote from Technocracy's Victory Program:

The conflict of world events compels the United States to install immediately the designed direction of the strategy of total war or face disaster.

Understand it. The mere passing of appropriations for the expenditure of billions by Congress does not produce a design or system of Total War.

Many of the proposals urged by Technocracy have been attempted by the Government of the United States; and the war program of these United States is wholeheartedly endorsed by every Technocrat, but it does not go far enough. Destiny knocks at the door of America. We are face to face with the greatest issue of all time, testing whether we are to go down into a new dark age or whether civilization is to survive and advance.

America Needs a Design

The United States must efficiently install at once a complete

mobilization of all the resources of its national entirety.

When any operation reaches the order of magnitude that makes possible only one way of operation, that way must be found and put into effect or the project must be abandoned. We must have a designed direction of war operations, or suffer eventual defeat.

This designed direction of national operations cannot be attained if America permits business and party politics to dominate the administration of our war program.

We have millions of blueprints of details without a single design for the whole, a heterogeneous hodgepodge of unrelated parts, without the slightest idea of what the completed structure will look like when, if ever, it is completed. Nothing which will operate can be constructed in that manner. Wages, prices and taxes are all soaring at every turn. We are confronted with advertising telling us how we may do our part to help win the war by helping to maintain some chiseling racket a little while longer in the manner to which it has become accustomed during peacetime. In the meantime, our war effort is assuming an order of magnitude so great as to be away beyond the capacity of private and group interests. They are interested only in the minute parts of the whole, and the situation grows more acute daily.

America must realize that in this age of technology the meth-

ods and practices of history, cherished by the upholders of the Price System, are incompetent to operate a Continent under the demands of total war. The facilities of yesterday's success have suddenly become the futilities of today and the defeat of tomorrow. The structure of America's economy demands that we Americans abandon the haphazard conflict of private and group interest in order that we may win this world war and thereby defeat the enemies of America and win the peace for America.

In the meantime our necessity is daily becoming greater in spite of the most magnificent efforts of Russia. If Russia loses, we have lost the war in Europe and we have lost in Asia.

Men do not create events; events create men. Today's crisis necessitates that America call upon the ability and statesmanship capable of installing the technological and social mobilization required for victory.

Men who have a lifetime of training behind them in chasing the illusive dollar eventually become a sort of animated cash register, with an extremely limited vision and a narrow point of view. This may not be a fault, but it is certainly a misfortune. When this type of personnel dominates our war effort, the misfortune is ours collectively. We can add nothing to what politicians say of one another. They know one another well, and you have heard the report of their findings many times.

Technocracy makes the unequivocal statement that such ability and statesmanship do not exist amongst the party politicians and business leaders of America. Technocracy charges that the business leadership of America lacks the vision to design and install a continental operation of total war and that such vision cannot possibly stem from the picayune confines of private business and party politics.

National Service for All

While Americans spend the greater part of their time and effort in contesting with one another to obtain a differential advantage over other Americans, we can never achieve a fighting national morale or even start an all-out war. Whom are we fighting? Fascists? Or ourselves?

Technocracy charges that America must abolish immediately all production for profit at a price, and substitute in its place the engineering design of production of the technological operation of the strategy of a Continental offensive.

America must fight as a Continental unit. The entire North American Continent from Greenland to the Guianas, from Galapagos to Alaska, must stand or fall as a single unit against a common enemy of progress and civilization.

Technocracy asks: How many disasters will America have to suffer before it installs the design

now called for by the march of events?

Are we going to do it the hard way or the hardest way? It is too late now to do it the easy way, but eventually we must have Total Conscription without withholding anything or anybody usable in Total War.

Technocracy urges immediate institution of total conscription by the United States of America.

For this purpose we can divide the population into two classes; those who are capable of performing some task either civilian or military, and the functionally incompetent.

The Government of the United States shall immediately institute the Total Conscription of all effectives, *male* and *female*, between the ages of 18 and 65, for national service (civilian and military). All citizens shall serve on the same basis of pay as the Armed Forces with the same standards of food, clothing and health protection, and with the same allowances for all dependents, regardless of rank or social position.

With Profits to None

No effective would get less than a private and none more than a general. No American would get more out of this war than the Armed Forces at the front, regardless of whether he or she were performing their part in transportation, communications, utilities, power, mining, milling or manufacturing, health,

education, policing, accounting or distributing, or design, construction, operation or maintenance. Each would receive all the prerogatives of the Armed Forces, such as education, training, medical and dental service, food, clothing, shelter and allowances, necessary transportation and recreation. These prerogatives are to be extended and amplified as promptly as possible for all. Every privilege extended to the Armed Forces would also be extended to the civilian effective, and vice versa, in order to prevent further interference with civilian and military operations.

The Government of the United States shall institute as part of this program of Continental operations immediate conscription of all national corporate wealth and its attendant institutions such as banks, trusts and insurance companies.

Thus, the most enthusiastic devotees of the status quo should find a quick solution of the problems that seem otherwise unanswerable to avoid financial loss in the war.

Total Conscription calls for the suspension of all dividends, profits, interest, rents, union dues and taxes; and for a moratorium on all debt and litigation for the duration and six months thereafter.

Thus freeze the profit and loss account for the duration and demobilization period.

The Government of the United States shall prohibit the transfer

of United States purchasing power in the form of currency, notes, drafts, or money orders of all corporations and residents of the United States to any corporation or resident of any alien country.

How long must Americans give aid to the enemies of America? All business with alien countries will be done through the Government of the United States to avoid giving economic aid to the enemy or "enemy neutrals."

The Government of the United States shall conscript all of the physical facilities and operating personnel of all export and import corporations. The Government of the United States shall be the sole exporter and importer.

Men-Machines-Materiel-Money

In order to carry on a Total War, it becomes necessary for us to open up a lot of toll gates and extinguish a lot of red stop lights. Total Conscription demands that:

The Government of the United States shall conscript all of the physical facilities and operating personnel of rail, bus, water and air transportation; all telegraph, telephone and radio communications systems; all public utilities and power producing and transmission systems; all of the manufacturing industries of the country; all of the oil wells and refining industries; all corporate enterprises engaged in mining.

This, of course, means the abolition of all open markets. All men and women engaged in production would become Government employes on the same basis of pay as the Armed Forces. All production would be turned over to the Government at its origin in land or sea or air and would be shipped over conscripted transportation through processing plants to strategically located terminals throughout the United States, to be redistributed when and where they are needed. This would continue for the duration of the war and six months thereafter, so that the red tape snarl-up which now exists with the property rights of materiel in production and transportation would be non-existent.

The Government of the United States shall conscript immediately all patents, inventions and processes extant in our national domain whether of foreign or domestic ownership.

This will increase our efficiency many-fold and enable us to use the most efficient practices in all of our physical operations without restrictions.

The Government of the United States shall assume all financial indebtedness of all municipalities, counties and states; and the Government of the United States, in return for assuming complete responsibility for the financial obligations of all municipalities, counties and states, shall arrogate to itself the sole power of

levying all taxes now levied by them.

This means that all minor political enterprises will be frozen for the duration. After all, Uncle Sam is the most reliable paymaster, so why not give everybody a chance to get on his payroll and at the same time free them from all taxes. When all incomes come in the form of a check from your Uncle Sam and all moneys paid out by citizens are paid back to Uncle Sam, we could make our war effort much more effective than by dirtying hundreds of tons of paper with the records of disbursements and receipts of tax moneys.

Build American Morale

The Government of the United States, as a measure of national safety and national welfare, shall close all public bars and limit the sale of spirituous beverages, wines and liquor to restaurants, hotel dining rooms and licensed liquor stores.

This would promote moderation of the use of beverages and discourage the abuse of them.

The Government of the United States, as a measure of national safety and national welfare, shall abolish all foreign language periodical publications, foreign language advertising and foreign language radio programs for American consumption.

Well, why not? What solution to any American problem can be efficiently promoted through a minority language?

The Government of the United States, as a measure of national safety and national welfare, shall abolish all foreign language and hyphenated American organizations, associations and fraternal societies regardless of whether they have been formed to promote political, commercial, cultural, educational, linguistic, artistic or other relationships.

None of the languages and few of the questions discussed by these organizations belong to America. We can help achieve a national unity by abolishing all these questions that must be discussed in a foreign language. Example—the internal political questions of aliens. Let us not forget that we have internal enemies as well as external enemies.

Coordinate and Consolidate

The United States Army shall be directed under the unified control of a land command; the United States Navy shall be directed under the unified control of a sea command; the United States Air Force shall be directed under the unified control of an air command; the fortifications of the Continental defense shall be directed under the unified control of a fortifications command. The entire military shall be under a General Staff with the constitutional Commander-in-Chief in supreme command.

There are four branches of the Armed Forces instead of two. A unified command is essential for a

unified people and is the first imperative of Total War.

All industry, mining, transportation, communications and other necessary units of Continental operation shall be unified under their various functional commands under a technological command of the whole. The entire technological command and the entire armed force command shall be under the unified direction of the constitutional Commander-in-Chief, Franklin D. Roosevelt.

The entire physical equipment of the country necessary to the military and civilian operations of the nation shall be transferred to the Government in exchange for United States non-negotiable certificates of deposit to terminate six months after the war.

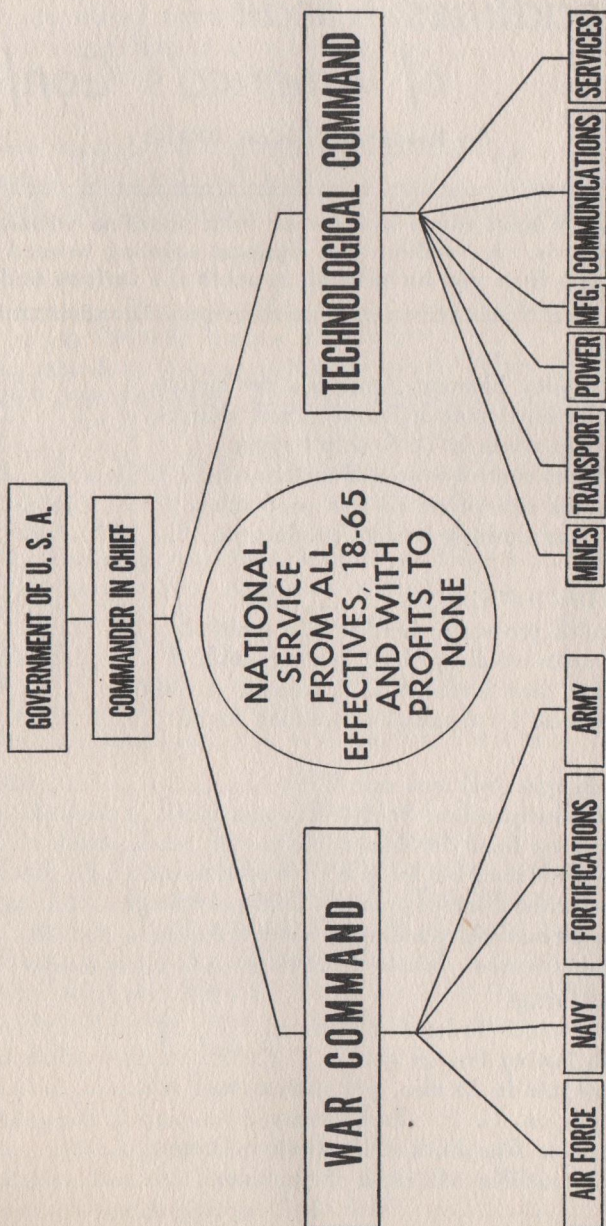
These specifications for Total Conscription to remain in force not longer than six months after termination of the war.

The pattern with which America carries out this war will determine to a great extent the kind of post-war America we will live in. Our job is here and our objective is to win the war first.

“Man, as the minister and interpreter of nature, does and understands as much as his observations on the order of nature . . . permit him; and neither knows nor is capable of more.”—Francis Bacon 1561-1626.

TOTAL CONSCRIPTION

OF MEN, MACHINES, MATERIEL, AND MONEY



NOTE - This is only a suggested alignment of the
Total Conscription Organization - not to
be considered final in any detail

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The Headlines Speak — of America's Confusion

by Research Division, 8741-1

Headline readers have much in common with headline writers; they are men of few words. A headline is a signpost pointing toward a mine; if you want all the facts you have to go beneath the surface and dig.

PRODUCTION

Muddled policy hampers America's production.....	6/21/42
War production bungled, House report charges.....	1/11/42
Charges huge waste in U. S. ship buying.....	10/29/42
WPB tightens control over war materials.....	1/24/43
Senators seek super-Czar of war production.....	1/7/42
Canadian war business half of production.....	12/26/42

TECHNOLOGY

Invents "Dry Ice" rifle.....	8/10/42
Cheap, quick process to harden iron reported.....	5/11/42
Frozen patents handicap U. S., Senators told.....	4/13/42
Bill seeks to draft inventive skill, patents, processes.....	8/17/42
Report process for magnesium welding found.....	6/19/42

STEEL

Truman charges steel men rule WPB.....	6/23/42
No real steel expansion: Senator Truman.....	8/12/42
Claim steel on hand for banned ships.....	10/3/42
Not money, not men, but scrap is U. S. need now.....	9/8/42
Make steel without scrap, promises Chili golden age.....	2/26/43
Discovers 80 battleships hiding in window frames.....	11/3/42
Steel famine feared—Senate Committee.....	2/4/43

NON-FERROUS METALS

200 gold mines ordered closed.....	10/8/42
U. S. still buying foreign gold.....	10/27/42
There's no tin in Mexico, yet natives find it.....	10/27/42
Plenty Tin in U. S.—Technocracy.....	8 and 9/42
U. S. Accuses Zinc Firm of Restricting Output.....	5/1/42
Charges Alcoa Delayed Output of Aluminum.....	6/15/42

CARTELS

Make cartel deal for short life flashlight bulbs.....	9/10/42
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Trusts blamed for lag before Pearl Harbor.....	9/3/42
Cartels plot second Munich, Arnold warns.....	6/3/42
Magnesium pool blamed for grave shortage.....	4/23/42
German dyes used in 90% of Yank uniforms.....	4/16/42

RAILROADS

Railroads warn they will need new equipment.....	10/2/42
Shortage of steel perils rail service.....	8/7/42
Railroads—Hitler's Achilles heel—or ours?.....	11/16/42

EDUCATION

College men need Math, Disappoint Navy.....	5/1/42
Get Vocational Education, Then Culture, says Editor.....	4/8/43
Army rejects 250,000 draftees as illiterate.....	4/29/42
Evening schools in Chicago to fit illiterates for Army.....	9/10/42
Hutchins sees University as War Industry.....	4/15/43

MANPOWER

Report Labor Draft Bills Sidetracked.....	10/29/42
U. S. Acts to Freeze Labor.....	4/18/43
War plants want 3½ million women.....	10/15/42
800,000 Women Unemployed, says U. S. Expert.....	10/5/42
U. S. Employment Hits 58 million, still gaining.....	10/15/42
50,000 Jobless get checks in Chicago.....	8/27/42
Millions short of Manpower, Senators find.....	2/26/43
Accident Toll Greater Than War Casualties.....	2/23/43
Need More People than there are in U. S.....	10/3/42
23% offering Blood to Banks in Chicago rejected as ill.....	12/14/42

AGRICULTURE

Farm Machinery Rationing Ordered.....	9/17/42
Crisis in Farm Tools Here, Dealers Report.....	4/14/43
One-Third of Farms Produce 80% of market output.....	4/2/43
Charges Farm Profiteers Peril U. S. War Effort.....	3/20/43
F.S.A. Reveals Ill Health of Farm Families.....	10/6/42
Corn Shortage ahead, Survey Indicates.....	4/9/43
Farmers Face Labor Pinch.....	4/16/43
Grain Storage Crisis Nears.....	5/18/42
Survey spurs hope for bumper crops.....	4/18/43

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Need Sugar? Guatemala has Surplus.....	2/29/42
Blames WPB Blunders for Coffee Rationing.....	10/27/42
200 Million Pounds Cheese stored, fear new influx.....	6/10/42
Frozen food stocks pile up, Seek Relief.....	3/25/43
Warns U. S. May Starve.....	11/19/42

Believes U. S. Can Grow Own Spices, Herbs.....	3/26/43
Rationing of all Foods Urged to Avert Crisis.....	11/27/42
Rationing Banking Set for January.....	11/24/42
Experts Evolve Plan to Ration Spending Money.....	11/30/42
U. S. to Seize Homes.....	10/13/42

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America faces Crude Oil Shortage, Landon Warns.....	12/1/42
U. S. Faces Oil Crisis, Senate Group Warns.....	10/23/42
Oil Companies Hit in Synthetic Rubber Inquiry.....	4/28/42

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Guayule Rubber Production Halted.....	4/43
Claims Rubber Output Months Off Schedule.....	12/26/42
Crude Rubber Supply Placed at 700 Thousand Tons.....	8/24/42
Asks Synthetic Rubber Plants for Grain Belt.....	4/26/42
Hints WPB Plot to Block Rubber Plants.....	2/25/42

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We now Fly Spitfires.....	8/31/42
Fighter Planes of U. S. Inferior, Truman Reports.....	9/14/42
Predicts Armor, 75 MM Cannon on Planes.....	2/24/43
Kaiser Plans Bomber to Fly U. S. to Tokio.....	4/6/43

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Life Insurance Premiums Rise.....	10/8/42
Individual Incomes at Peak in January.....	3/15/42
Loans to Pay Income Taxes Rise Sharply	3/10/43
"Come and Get Us" War Workers Defy Tax Collector.....	3/12/43
Assails Profit Motive in Sale of War Bonds.....	10/21/42
Find Cashing of War Bonds Goes Unabated.....	3/23/43

FOREIGN LANGUAGE

Probe Reports Subs Informed by Radio Talk.....	10/8/42
Tighten control of Air Shows in Foreign Tongues.....	6/30/42
Editor of French Language Weekly in Montreal Urges English Alone, for North America.....	3/41

America must realize that in this age of technology the methods and practices of history cherished by the upholders of the Price System are incompetent to operate a Continent under the demands of total war. The facilities of yesterday's success have suddenly become the futilities of to-

day and the defeat of tomorrow. The structure of America's economy demands that we Americans abandon the haphazard conflict of private and group interest in order that we may win this world war and thereby defeat the enemies of America and win the peace for America.

Floods, Food, Sabotage and Defense

by R. F. Novalis

AMERICA was reminded twice this spring of the cost of delaying action on National problems, concerning which Technocracy had published warnings years ago. Both reminders occurred in May.

Floods

According to the Red Cross 160,000 people were flooded out of their homes in six mid-western states by rampaging rivers. This occurred because the engineering work needed to prevent floods in the Mississippi Valley, draining 44 per cent of the U. S. A., has not been done. Some results of the disaster:

Croplands

According to H. P. Rusk, Dean of Agriculture of the University of Illinois, 1,257,698 of Illinois' 28,000,000 acres were flooded, 181,500 of this acreage being cornland which could have raised 10,000,000 bushels. Wheat losses were estimated at 136,910 acres and oats 68,064 acres. Gullies were started in every sloping field and a tremendous amount of good top soil washed away.

Sabotage

Fifty lead and zinc mines were closed down in three states, Bagnell hydro-electric dam was endangered, R. G. LeTourneau and Caterpillar Tractor plants ceased operations, the "big inch" pipeline broke in two and

stopped the flow of 200,000 barrels of oil daily to the East and/or the Castles in Spain (see article page 41), and a large oil refinery at Coffeyville, Kansas, was completely covered by the Verdigris River. And so on, column after column.

Hindsight versus Foresight

Flood disasters in the Mississippi Valley such as the one this Spring have become almost an American institution. Each one is a gravestone certifying to our collective National hindsight.

In *The Technocrat* for March and April, 1940, in two articles entitled "Engineering with Nature," and again in the *Great Lakes Technocrat* for September, 1942, in "Disappearing Soil" Technocracy analyzed the causes of these recurring floods and outlined the engineering way to solve this problem.

But Old Man River just keeps rampaging along.

Defense

On May 10, 1943 American armed forces landed on Attu Island to throw out the Japs. Remember, Attu is American soil. In all the preparations preceding and following Pearl Harbor no apparent attention was paid to this island.

But our "little brown brothers" were not as dumb as we thought. On

June 8, 1942 they took peaceable possession of this American land. Not till then did America realize its strategic importance and proceed to do something about it.

In November 1940 *Technocracy*

magazine published a map depicting the coastal defense bases necessary for American security. One of the most important of these was Attu.

But Old Man Politics just keeps muddling along.

Is This A Total War?

Trends in America

Electricity production in the United States reached an all-time high in the month of March, with a total of 17½ billion kilowatt-hours for public use. (Federal Power Commission data.)

Approximately 60 per cent of the cost of government industrial plant expansion in 1943 will be for machines and other productive equipment, compared to only 45 per cent last year (WPB figures).

The U. S. gage business is normally about \$4 million a year. Last year it was \$170 million. Gages are those precision instruments which check other instruments.

Our government declared war on December 8, 1941, but American industry, still under the interference-

control of the Price System in and out of Washington, apparently has not yet decided whether to fight or not. Our raw material and transport factory capacity is *still* being used at less than a 50 per cent load factor. This is according to officially "admitted" figures of the Division of Information, War Production Board. Here they are:

In reading these figures remember that 168 hours, the total number in a week, would equal 100 per cent capacity. Clearly America's factories are being held down, are not producing all they could. What could our technology produce if our industries should declare war on world fascism? It will take Total Conscription to answer that question.

WEEKLY HOURS OF PLANT (EQUIPMENT) UTILIZATION

	October 1942	October 1941
Airplane frames.....	91.4	73.0
Airplane engines.....	103.4	95.5
Airplane propellers.....	107.0	93.7
Shipbuilding	76.8 (Sept.)	58.0 (Sept.)
	January 1943	
Iron & Steel.....	70.9	
Electrical machinery.....	63.0	
Machinery (industrial).....	66.5	

The Case of the Disappearing Waterworks

ANCIENT Rome had its aqueducts, Gunga Din had his water bag and/or bucket and Lakewood, Ohio, a suburb of Cleveland, has its redolent, political saga about the disappearing waterworks. Now you see it, now you don't.

We do not know what political and financial high jinks, if any, were performed by the Senators of ancient Rome in connection with the construction of its famous aqueducts. These "doings" are lost in the mists of antiquity.

As for Gunga Din, the record shows that he carried water to the wounded soldiers of his regiment even under the heaviest fire to help relieve their suffering. In the end he was killed in action but his memory lives on in the poem of Rudyard Kipling.

The connection between these three events so far removed from each other in space and time may seem remote, but the end results are dissimilarly similar. Rome got its aqueducts, the wounded soldiers of the Queen got their water, but the free-born citizens of Lakewood got the "works" without the water. Thus we see that in each case water was involved. In addition our Lakewood saga involves stock, but whether or not the stock was watered is not revealed.

The case of the disappearing wa-

In the Opera "Mikado" the character Poo-Bah held down all the following offices: First Lord of the Treasury, Lord Chamberlain, Attorney General, Chancellor of the Exchequer, Privy Purse, Solicitor, Paymaster General, Lord High Auditor, First Commissioner of Police and Archbishop of Titipu. Incorporating within himself, as he did, all these offices he was constantly muddled up. The situation related in this story isn't quite that bad.

terworks came to our attention from a story in *The Cleveland Press* by Clayton Fritchey on March 4, 1943. It has all the earmarks of a classic example of political fuddle and muddle. Here is the record.

Lakewood, Ohio, had been buying its water from the City of Cleveland for many years. A few years ago the elected officials of Lakewood became concerned about this long standing relationship. So they donned their togas and held collective skull practice.

It was decided that cheaper wholesale rates for water from Cleveland were in order. So far, so good. The people's representatives then called upon Cleveland to slash its rates. The big, neighboring city made no response to this request. So they recommended to their constituents that

Lakewood build its own waterworks.

The proposition was put on the ballot twice and the citizens voted no each time. They simply didn't want their own waterworks, it seems.

In spite of the expressed wishes of their constituents, Mayor Amos L. Kauffman and Council, on Jan. 1, 1940, authorized the issuance of \$1,750,000 in bonds to construct a waterworks. Here's where the fuddle starts.

The bonds commanded an interest rate of about 2½ per cent and were bought by the Prudential Insurance Co. So far the people's representatives had obligated Lakewood to paying out an annual interest charge of about \$43,750. Of course, they had \$1,750,000 cash on hand to do it with. This political exploit now enters the higher brackets.

It was expected that the interest cost would be met by the revenue from the new waterworks after it was built. One little item, however, had been overlooked. They had no site on which to build the plant and none could be found.

Undaunted by this detail the city fathers hired the best waterworks' engineers that money could obtain. There is no doubt about it, the plant would have been a honey, had it only been built. Oh! How white were the snows of yesteryear.

Finally it dawned upon the collective councilmanic mind of Lakewood that no site for the plant was available, so the construction deal was called off. Then to prove their devotion to the immediate interests of the

people, the city fathers chiseled the engineering firm's bill down from \$53,700 to \$40,000. At one swoop this saved the taxpayer \$13,700.

At this stage of events, the saga of Lakewood summed up as follows: The citizens had been overruled by their hired servants. They, the citizens, had, further, been committed to pay \$43,750 a year interest to the Prudential Insurance Co., the nihilistic program of the city fathers had been aborted by a single physical fact, a neat bit of chiseling against a third party acting in good faith had been put over, and, lastly, Lakewood had on hand the tidy sum of \$1,710,000.

What to do with this pile of debt certificates now became a vexing question. Here's where the muddle starts. The Mayor decided to invest it in other bonds of a type paying more interest than the waterworks' bonds called for. The next step would be to use the higher income interest to pay off the lower outgo interest. What could be simpler and more in keeping with the American "get rich quick" tradition.

At this point the law stepped in to keep the muddle from getting worse. The courts ruled that the suburb's officials could not play the bond market with the taxpayer's money. Thereupon, the City Council authorized the mayor to buy back the waterworks' bonds from Prudential. But the insurance company, being nobody's fool, demanded a premium for surrendering the securities so early in the game. Stalemate.

The next hunch impinging upon the councilmanic mind was to make a junket to New York. They decided to confer with Prudential and attempt to reverse the historic financial policies of the bond market. Here they met an unavoidable expense of \$850. But, conscientiously, the councilmen paid for all of their own tickets to the Broadway shows. Without a doubt this saved the taxpayers an unspecified but respectable amount of money.

Nothing tangible came of the trip. Lakewood still has the cash and Prudential holds the bonds. As far as the general public of the suburb knows, that's the way things stand today. In the meantime, while the mayor and city council of Lakewood were hopping around from one dizzy scheme to another, the City of Cleveland cut its water rates to Lakewood 21 cents per 1,000 cubic feet. This occurred on Aug. 1, 1940. Remem-

ber that the illicit authorization of bonds took place on Jan. 1, 1940.

The mayor contends that the threat of building a plant in Lakewood forced Cleveland to cut its rate. Between Aug. 1, 1940 and Dec. 1, 1942, Lakewood saved almost \$140,000 under the new rate. On the other hand, William P. Grotenrath, Republican ward leader of Lakewood, challenged the mayor's contention. He points out that of the 21 per cent cut in rates only 5 per cent has been passed on to the domestic users of water. What became of the other 16 per cent? Deponent sayeth not, neither does anyone else.

On March 4, 1943, Mr. Grotenrath reported a final chapter to the saga of Lakewood. He charged that Mayor Kauffman had "secretly" bought back the bonds a month ago.

Fuddle and muddle, thy name is politics.

Science Looks at Politics

"We must recover the world from the politician, Time and again nations have been thrown into chaos under poor political guidance. We cannot afford this type of leadership. The direction of great national affairs must, of necessity, pass into the hands of people (workers in natural science, engineering and technology) trained and skilled in the ways of industrial management; people who can lead because they understand the

relationship of cause and effect; people who are mentally honest because that has been their habit of life through the laboratory and the drafting room and the construction gang; people who treat their fellow workers as intelligent human assistants and not as morons.—Dr. Walter S. Landis, vice-president of American Cyanamid Co., in "*Chemical and Engineering News*," bulletin of American Chemical Society.

When Do We Stop Eating?

by Andrew T. Hagen

FOR about a year this country has been trying to mobilize 65 million persons on a voluntary basis, without planning for the whole economy, to do the work that must be done. The course pursued is failing and developing shortages of about five million persons. By conscription of all persons between 18 and 65 years of age, an effective labor force of over 70 million persons would be available. The manpower is ample, with millions to spare.

Operation by private enterprise in wartime results in shortages of food beginning with meat, fish, dairy products and, by the end of this year, vegetables, fruit and all kinds of food. The Secretary of Agriculture's Report for 1942, however, shows that this country had more cattle, more calves, more hogs, more sheep, more poultry than at any time in the country's history. And there is corn and wheat in storage for about two years' supply, without any new crops; there is also ample supply of other grains, beans, and plenty of cotton. Private enterprise can't distribute abundance!

Before the war 10 per cent of the farmers produced about 54 per cent of the country's food supply. But now the WPB has cut off the material for sufficient manufacturing of farm machinery and repair. Farm labor has gone into defense work

Jack Sprat could eat no fat and his wife could eat no lean. We wonder how they are getting along now.

and military service, both paying more than the farmers ever could pay. With ceilings on wholesale and retail prices, but no ceiling on the cost of production, with no system for allocation of the nation's manpower, the production of food supplies is bound to decline and dry up. Under Technocracy's Victory Program all present farm machinery would be pooled and put to full use and farmers would be enlisted in national service, to produce food. There would be ample machinery, ample manpower and sufficient production, with about three million farmers to spare for other essential work.

There is no need for food shortages in this country in this day and age. Given a system, science and farm technology can provide an abundance even during the war. What are the operators of the Price System doing to solve food shortages? They advise the people, individually, and each for himself, to grow their vegetables in "victory gardens" and have some poultry, a pig, and maybe a goat, in their backyard. This is an attempt to solve a

technological problem by the methods of feudal agrarianism.

About 275 million dollars are now being spent daily on war production and the expenditures are increasing. That is one way of operating, and it is good business for the 100 corporations getting about 83 per cent of all war contracts. But debt creation is not necessary and this war could be fought more effectively without business and profits and without the creation of a single penny of debt.

Inflation is upon us with a steady rise in the price structure and accumulating billions of dollars in the pockets of people exert more and more pressure. That is something to put holy fear into the operators of the Price System. They try to combat inflation by stabilizing and rationing and every day we get a new dose of it. Trying is not enough, and stabilizing wholesale and retail prices and then rationing the available supplies after shortages occur, does not stop inflation. On the contrary, it does interfere with distribution of consumable goods and gradually dries up and kills off the production of food supplies.

Technocracy proposes that the government acquire title to all products of mines, farms and factories at their source and from the source direct the flow through all processes to final distribution, with national service from all and profits to none.

In every line of endeavor, our country's technological environment dictates the course to follow and what must be done. We human beings have to adapt our operation meth-

ods accordingly. That is what Technocracy's Victory Program of Total Conscription is designed for. Out of that operation would come the New America and the true American way. But in every line of endeavor till this day the country's leadership is hell-bent on some course opposite to that required by our environment. They strive to maintain the *old* American way. Conditioned as they are, nearly all the people are now trying to get on "easy street" with their snout in the trough of government spending.

What does it all lead to? In Technocracy Magazine A-22, Howard Scott, Director-in-Chief of Technocracy Inc., asks: "What Shall It Profit Ye?" and he gives this warning: "If we as a nation continue to fight this total war under the competitive practices of business enterprise, the United States faces the greatest reduction in standard of living ever faced by any nation in history."

Lend-Lease Aid

Most people think food shortages in this country result from Lend-Lease aid. That is not so; lend-lease deliveries of agricultural and food products constitute a very small part of our total production. The military forces of this country used about 7 per cent of our total production in 1942; lend-lease aid was much less than that. Both amount to about 10 per cent of our total food production. Those requirements will be greater in 1943. Delivery means goods transferred, before it leaves

United States, to representatives here of the country receiving the aid. What amount reaches the country and what amount goes to the bottom of the ocean is not revealed.

We ship no food to Australia and New Zealand for the American forces

there; those countries supply our forces with the food required in return for military items and services. The following figures are copied from the Report to 78th Congress, of Mr. Stettinius, Jr., Lend-Lease Administrator, in March, 1943:

Total Lend-Lease Aid Delivered from March, 1941 to December 31, 1942

Military items, tanks, aircraft, ordnance, etc.....	\$3,709,466,000
Industrial materials, machinery, metals, gasoline.....	1,570,660,000
Services rendered, ship repair, shipping, etc.....	1,705,054,000
Foodstuff and agricultural products.....	1,262,553,000

Total services and goods delivered.....\$8,252,733,000

The following figures will show food deliveries in weight in relation to our supply for year 1942. Figures are in number of pounds.

	Delivered	Our Supply	Per Cent of Our Supply
All meats.....	1,134,000,000	22,274,000,000	5 %
Dairy products.....	4,272,000,000	125,466,000,000	3.4%
Fats and oils.....	723,000,000	5,470,000,000	13.2%
Eggs, dried.....	684,000,000	6,819,000,000	10.0%
Fish, frozen and canned..	156,000,000	2,189,000,000	7.1%
Canned vegetables.....	51,000,000	6,630,000,000	0.8%
Fruit and juices.....	89,000,000	5,150,000,000	1.7%
Corn products.....	415,000,000	300,148,000,000	0.1%
Wheat products.....	393,000,000	118,028,000,000	0.3%

Of the meat and dairy products a few may be itemized:

Beef, 0.1%; mutton, 0.4%; pork, 9.8%; butter, 0.7%; cheese, 23%; condensed milk, 7.2%.

Food is getting scarce because of the refusal to mobilize for total war

and to install designed direction. When do we stop eating?

"War is not much different from business, except that in war you lose lives instead of dollars!"—Roy Porter, press service cable editor, July 5, 1942.

"We must get the conduct of the armed operations of this war into scientific hands and out of political hands."—Wendell Willkie, July 23, 1942.

FIVE MIGHTY LAKES

by Alice De Kroyft Anderson

Five mighty lakes, great inland harbors all,
Whose shores a wealth of mine and forest
know,

Round which big cities grim and hungry
sprawl

Astride the paths along which trade must
go.

Extensive forest tracts provide the means
For annual crop of trees, if given care;
While in secluded parts are virgin scenes,
Vacation places ever fresh and fair.

Abundant coal and iron lead the roll
Among this area's chief activities,
Its mills and plants and transport all extol
Technology and its discoveries.

Five mighty lakes to serve a lucky race
And make its native land a functional
place.

CONTRIBUTORS TO THIS ISSUE

W. E. Walter is an authorized Speaker-Organizer of Technocracy Inc. He has been an active Technocrat for years and has participated in the growth and development of Technocracy in practically all capacities within the organization.

Alice DeKroyft Anderson is a member of Section 1, R. D. 9344 in Minneapolis, Minn. She is attempting the difficult job of writing objective unemotional poetry.

Andrew T. Hagen is Chief of Staff of Section 5, R. D. 11235, Phoenix, Arizona. He is an authorized speaker for Technocracy Inc. and has been a member for 10 years.

Keith Wheeler is a war correspondent for the Chicago Daily Times. He is not a member of Technocracy Inc.

Contributions by the several Divisions of 8741-1 are usually collective compilations.

R. F. Novalis is an active member of 8741-1.

William Rampelt is a member of Section 2, R. D. 8141, Cleveland, Ohio.

For copies of GREAT LAKES TECHNOCRAT and other literature, and for information regarding meetings and activities of Technocracy Inc., in the Great Lakes area the following Section addresses will be helpful.

7940-1—350 Sixth Ave., Tarentum, Pa.
8041-1—204 Columbia Bldg., Pittsburgh, Pa.

8040-2—Box 356, Ambridge, Pa.
8040-3—Leif Building, Rochester, Pa.
8041-1 1042 West 57th St., Ashtabula, Ohio.

8140-1—% Elmer Baird, 12th St. Ext. N.W., Canton, Ohio.

8141-2—Commercial Bldg., 2056 E. 4th St., Cleveland, Ohio.

8141-3—38 South High St., Akron, Ohio.

8141-4—2160 Front St., Cuyahoga Falls, Ohio.

8141-5—15324 Lorain Ave., Cleveland, Ohio.

8141-7—501½ Tuscarawas St., Barberton, Ohio.

8141-10—187 S. Arlington St., Akron, Ohio.

8141-14—113 East Main St., Ravenna, Ohio.

8141-15—12516 Shaw Ave., Cleveland, Ohio.

8339-1—689 S. Richardson Ave., Columbus, Ohio.

8339-2—302 N. Clairmont Ave., Springfield, Ohio.

8341-1—2276 Putnam St., Toledo, Ohio.

8342-1—4477 Woodward Ave., Detroit, Michigan.

8342-2—158 So. Johnson Ave., Pontiac, Michigan.

8439-1—35 Davies Bldg., 4th & Main Sts., Dayton, Ohio.

R. D. 8641—916 E. Corby Blvd., South Bend, Ind.

8743-1—Room 326, Empire Bldg., Milwaukee, Wis.

8844-1—217½ Pine St., Green Bay, Wis.

8844-2—1208 N. Richmond St., Appleton, Wis.

8844-3—135 Van St., Neenah, Wis.

9038-1—4518 Delmar Blvd., St. Louis, Mo.

9344-1—240 S. 4th St., Minneapolis, Minn.

9439-1—1611 E. 42nd St., Kansas City, Mo.

9648-1—411 La Bru Ave. N., Thief River Falls, Minn.

Tramp, Tramp, Tramp, the Kilowatts are Marching

by William Rampelt

ALL over the world today can be heard the tramp of marching feet and all over the world today is also heard the march of something else. Although the march of this something else is heard by only a few, these few know that that march will bring greater changes and repercussions than the tramp of marching soldiers—and that march is the march of technology.

Already that march is becoming louder and louder, and even those will hear it who have been turning a deaf ear to it.

From Akron comes news that all large bomber tires will soon be made by machine. Already orders for multiple drilling and cutting machines are being filled all over Cleveland. The war has increased demands for goods but has also increased the demand for more and more, faster and faster high-speed machinery. Labor demands and gets higher wages. Industry counters by more machinery and less labor.

For a moment, let us look abroad for the march of technology. There, where formerly lay our greatest markets, we now find technology taking them away. South America is rapidly becoming more and more self-sufficient. It has been buying more ma-

chinery and manufacturing its own finished products. Even lowly India is now making 90 percent of her own war needs.

The magnificent defense of the Soviet Union by the Russians shows that her productive machine has also increased tremendously in the last 10 years. All over the world technology is marching, making more countries more self-sufficient in the need for finished products. International trade for the United States is rapidly vanishing even though our State Department is vainly trying to capture this elusive creature with loans and subsidies.

With the close of World War II, a new era will dawn, an era of greater machines, greater productiveness, greater abundance and smaller markets. The United States will emerge from World War II with a productive machine that will be able to produce an abundance, while 20 millions are idle, on relief, and 10 millions lean on shovels on WPA. Through all this, the only bright spot is the amusement of the Technocrats, who are watching, knowing and showing the way out of an impending social disorder that will dwarf anything in the past, as a slaughterer would a tea party.

Logistics Now First in Military Science

Total War demands that America make the fullest use of its Technology. The contest is between machines not men. Logistics, the third rater of former wars, today dictates the strategy and determines tactics. You see, logistics is concerned with the supplying of the materials of warfare and the time-space factor must be given first consideration.

Speaking of space, every consideration must be given to its conservation. One of the possibilities proving to be of great importance in the shipment of food products is dehydrated foods. Valuable shipping space is being saved for they require only one-fourth the space and weigh one-half as much as foods in their natural state.

With an eye on the time, duplication of our efforts must be minimized. Our engineering forces have developed many methods of testing and inspecting the finished product to insure it against the possibility of failure at the vital moment.

No one knows better than the logisticians that, no matter how superior the materials of warfare over that of the enemies, all will be in vain if not supplied at the proper time and place.

Considering places—How many trains does it take to move a division?



Photo Courtesy Pennsylvania R. R.

75 trains! It must move as a unit—trains follow one another a few minutes apart. A modern division consists of more than men alone. There is also tanks, armored cars, tractors, artillery, anti-aircraft guns, etc. This is a technological war!



U. S. Maritime Commission Photo

Supplying America's modern army demands that a technological revolution take place in America's shipbuilding industry. In World War I construction was on the ways and inside the ship. Operations are now dispersed over the entire shipyard.

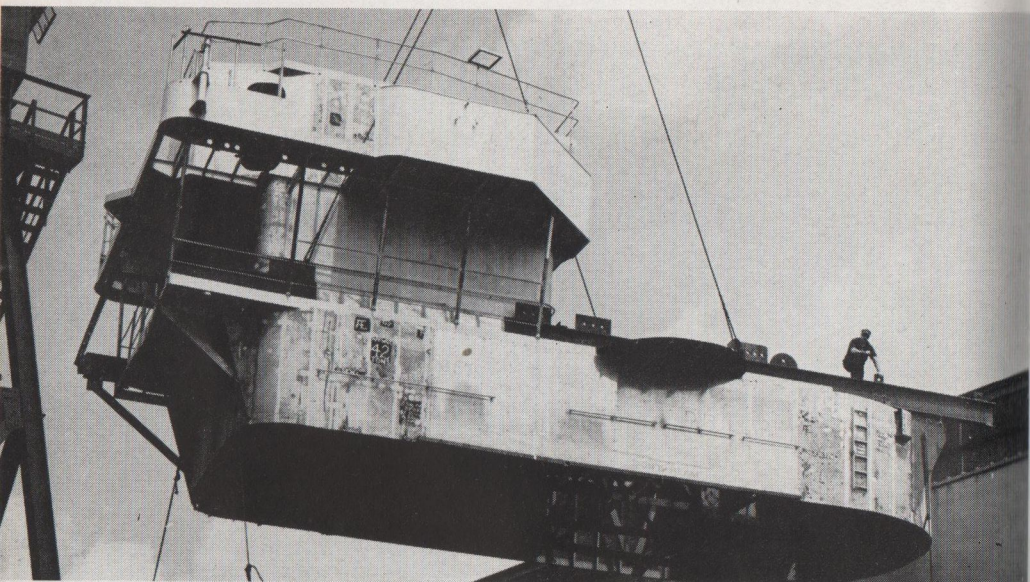
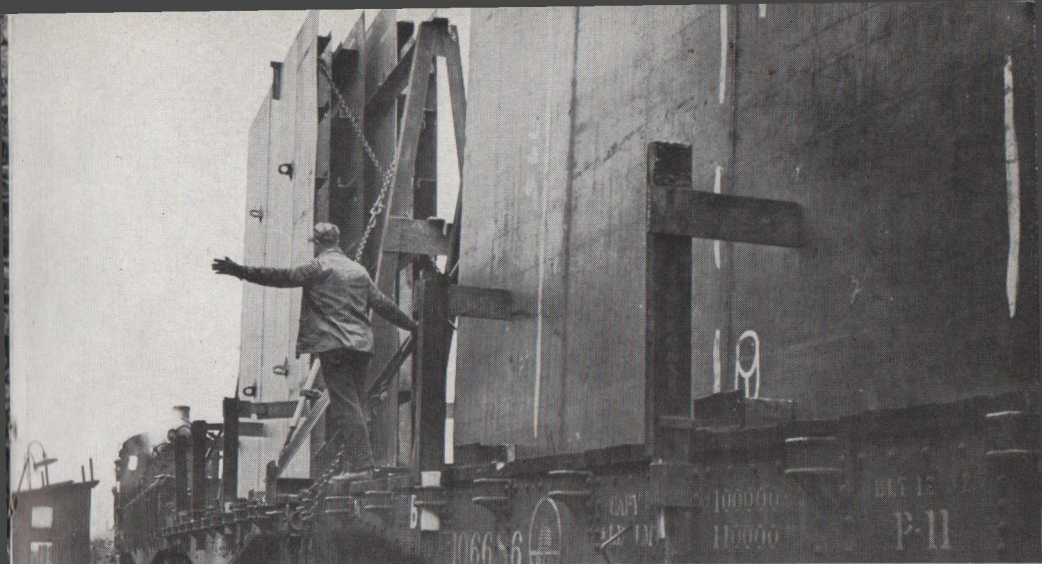


Photo Courtesy Federal Shipbuilding & Dry Dock Co.

It's a forward deck house starting on its journey to be welded onto a knifelike hull. It weighs 84,000 pounds. A new record is being set in the building of destroyers by prefabrication of parts and by using shipways as "assembly stations."



O. E. M. Photo by Palmer

Prefabricated sections for ships under construction at a large eastern yard are carried six miles to the ways on flat cars. The application of modern technology is saving many valuable months in the construction of America's "liberty fleet."



U. S. Maritime Commission Photo

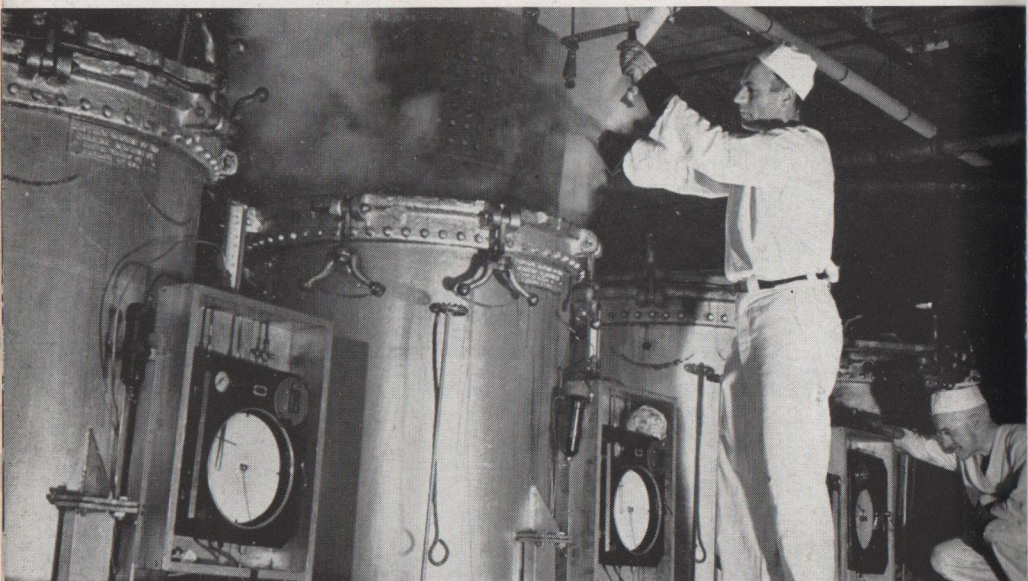
Twenty-four hour shifts prevail as three liberty ships are prepared for launching. Shipbuilding output has increased 700 per cent since Pearl Harbor. Some contrast to World War I. Not one cargo vessel ordered by the government was delivered until after it's termination.



U. S. O. A. Photos by Knell

Why ship water? About 41 pounds was extracted from 60 pounds of pork in a vacuum rotary dryer at the Beltsville Research Center.

This is a big pile of raw carrots, weighing 145 pounds and through dehydration shrunk to a pile weighing 14 pounds, a 10 to 1 reduction.



U. S. O. A. Photos by Knell

Precision controls under the direction of trained technicians are required. Using a crane, the operator lifts an iron basket full of diced carrots from the blanching vat. Blanching is necessary to inactivate the enzymes, which are harmful to the keeping qualities.

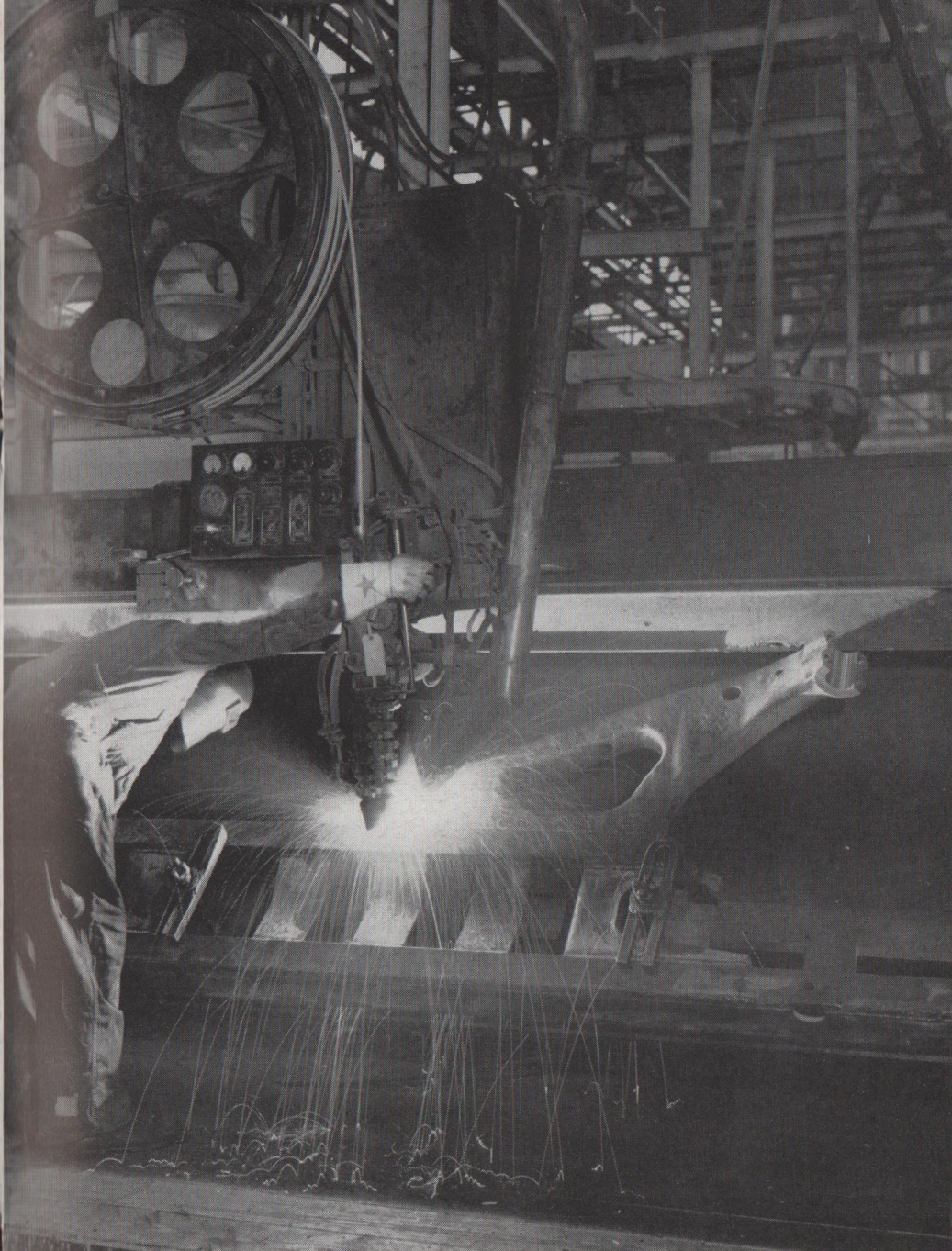


Photo Courtesy Caterpillar Tractor Co.

Welding for a Total Victory. A welded joint will stand far more abuse under the strain of impact and tension than a hot-riveted or bolted assembly—and saves vital man hours! As further insurance that shipments will not be in vain—



Photo Courtesy Caterpillar Tractor Co.

Technology replaces \$90,000,000 worth of radium by the million-volt portable industrial x-ray unit. A turbine casting is to be inspected. Defects five to six inches deep may be spotted, thus preventing the failure of a vital part.



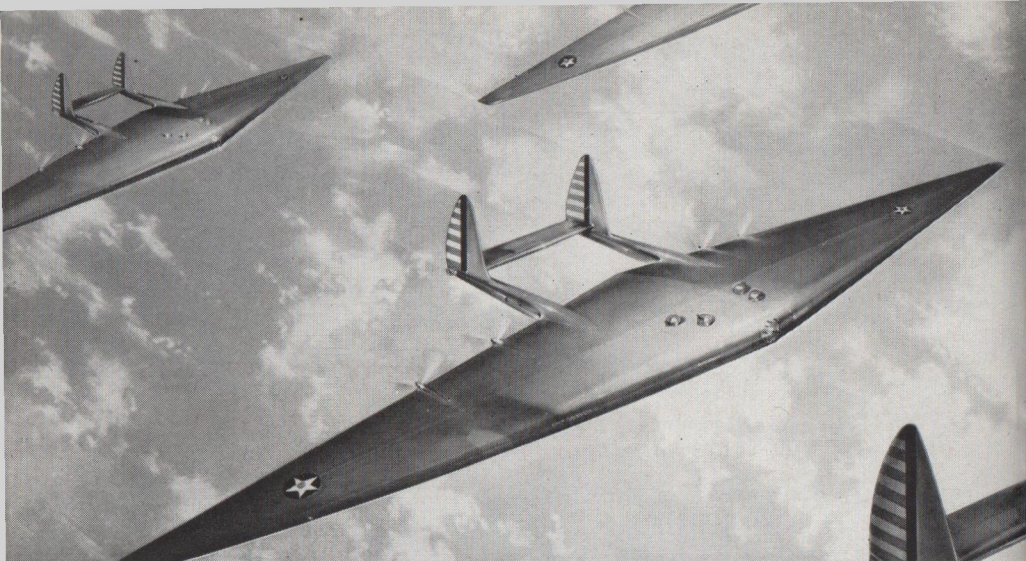
Photo Courtesy Caterpillar Tractor Co.

Through the courageous effort of the U. S. Army, the rugged country has been broken and the ground-work laid for a much needed route through Alaska's back door, thus insuring the safe shipment of supplies to our troops stationed in the far north.



Photo Courtesy Caterpillar Tractor Co.

Total war demands supremacy in air power for America and her allies. "Caterpillar" Diesel D8 Tractors, with LaPlant-Choate scraper moves over 1,000,000 yards in the construction of an airport on a mountain plateau in Johnstown, Penn.



Flying Wings for a Continental Offensive! Not only a long-range Continental bomber but also a freighter of the skies. Stripped of its bomb racks it may be used as a troop ship to carry 300 fully equipped men or two twenty-five ton tanks.

Our enemies' victories were due to their blitz striking power, made possible by their then, superior technology, America's entry into the war has upset that superiority complex. But let's not be over confident. We are still using too much of yesterday's methods to fight today's war. For instance transporting supplies by rail, highway and especially on the high seas is slow and hazardous. Their chief purpose should serve for the movement of bulk supplies to defense bases surrounding this continent from which long-range bombers, today's weapon, may operate to conduct America's offensive. Our naval power is a yesterday's weapon and means of transport. At best it can serve only in the final campaign after long-range Continental bombers have wrought havoc over the lands of the enemies that dare threaten the destiny of America.

The answer to the time-space factor is Technocracy's Flying Wing. Its specifications:

Range: 12,000 miles

Wingspread: 330 feet

Ceiling: 35-40,000 feet

Speed: Over 300 m.p.h.

Bomb Load: 50 tons

As a bomber, Technocracy proposes their operation in fleets of 1,100 and one fleet to operate from each of the 22 main bases, surrounding this Continent, proposed by Technocracy. Five fleets, 5,500 planes carrying 275,000 tons of bombs, would only need to pass over their objective once!

In its adoption fascism will see the handwriting, not on the wall but in the skies!

Shipshape Work at Shipshaw

While America struggles with the impossible task of coordinating its economy under the merchandising practices of the Price System, every entrepreneur in the land, with few exceptions, is making hay while the sun shines.

Horatio Alger Takes a Back Seat

THE national hero of America, Horatio Alger, has been mouldering in his grave these many years. But "Ragged Dick," "Tattered Tom," and "The Young Salesman" live on in the myths of Americana. Now, however, comes a story from up in the wilds of Quebec which puts their piddling successes to shame. It is so super-successful that it would be quite in order for every library in the land to recommend it to replace the honest but obsolete heroisms of Alger.

The characters are as follows:

"The Young Salesman" — The Aluminum Co. of Canada, Ltd., and its parent, The Aluminum Co. of America.

The Big-Hearted Uncle — Metals Reserve Corp. of the United States Government.

His Million and One Chiseling Nephews — All of Us.

The Innocent Bystander Hurt in the Melee — T.V.A.—Grand Coulee — Central Valley Project in California and Colorado Big Thompson Project.

The Net End Product—*Shipshaw*: A million and a half more installed horsepower of extraneous energy.

The plot opens with the beginning of the second world war in September, 1939. The demands of a technological war forced upon America by the Axis Pact of Fascism dictated the immediate installation of ever more and more hydroelectric power in America to manufacture aluminum for war planes. This was clearly evident as early as October 1939. But the Saguenay River, rising out of Lake St. John in Quebec, continued to flow on in its peaceful way unruffled by the trend of world events. After all it couldn't speak for itself. However, every hydroelectric engineer in America worth his salt had long known that a million and a half white horses lay chained within its bosom.

A million and a half horsepower of energy went to waste every day for two long years while the Axis Pact of Fascism conquered Austria, Belgium, Holland, Poland, France, Greece and so on, almost ad infinitum. Was this neglect to develop America's resources Continental treason? Not at all, under the rules of the game of the Price System. It was merely good business. After all, you know, Big Hearted Uncle hadn't yet appeared upon the scene.

Then the Japs bombed Pearl Harbor. At this point Big Hearted Uncle enters our story. He did so with

grandiloquent phrases and the cornucopia of an abundant pocketbook. Almost at once his million and one chiseling nephews gathered around. On a narrow neck of land between two dirty rivers near the east coast the clans met for consultation. In the canyons presided over by the Goddess Ceres atop the Board of Trade building in the Middle West conferences were held. From within the picayune confines of every board of directors' room in America the word went forth. "War is always good business."

The Shipshaw power project is big, bigger than Boulder Dam. It was a tough job, a prime example of engineering and technology. Its construction was accomplished at top speed with a double force of men and equipment. Work went on through two winters in temperatures as low as 30 degrees below zero. Today we can say: "There she stands," a part of the North American Continent. Technocracy salutes this project and the men who worked on it. It will be a great day when the million and a half white horses of Shipshaw, and the additional half million of its related projects at Chute-a-Caron and Isle-Maligne begin to exercise their full impact upon the social structure of America.

Now, what of "The Young Salesman" of our story? Didn't he build the project? No—he didn't even hoist one bucket of concrete. But, you say, he must have had a finger in the pie somewhere. Now, don't look at the last chapter to see how our Horatio Alger made out. We'll re-

veal that in a minute. "The Young Salesman" not only had a finger in the pie, he had his snout and all four feet right in the middle of the trough.

The entire Shipshaw project belongs to Aluminum Co. of Canada, Ltd., a subsidiary of the Aluminum Co. of America. Big-Hearted Uncle, that is, the Metals Reserve Corporation of the U. S. Government, advanced our "Young Salesman" \$68,500,000.00 *without interest* to construct a project which costs only \$65,900,000.00. What was the extra \$2,600,000.00 for? Don't ask us, all we know is that it is super-successful.

Other delightful aspects of our story are as follows: The U. S. Government contracts to buy from "The Young Salesman" 1,370,000,000 pounds of aluminum by the end of 1945. Of this, 274,000,000 pounds will cost our Big-Hearted Uncle the excellent price of 17 cents a pound and 1,096,000,000 pounds the middling price of 15 cents a pound. For every pound of aluminum delivered at 15 cents, Uncle pays his chiseling nephew 10 cents and credits 5 cents against the advance of \$68,500,000.00. For every 5 cents so credited, nephew may borrow another 5 cents from Uncle at 3 per cent interest, up to \$34,500,000.00. If the war ends before our story is finished and if Uncle cancels the contract for aluminum, our "Young Salesman" will not be responsible for paying off the balance. Boy, what a deal!

We're not to the end of our story yet. We told you at the outset that our "Young Salesman" was super-successful. The Canadian Govern-

ment has allowed him a "writeoff for taxation purposes in the form of accelerated depreciation of \$154,000,000.00 on his investment of \$236,000,000.00 for power and production plants at Shipshaw and Arvida in Quebec and Kingston, Ontario." This special depreciation concession amounts to 60 per cent of our "Young Salesman's" assessment. It is justified, according to the Government of Canada, because of the essential nature of the work and because the productive capacity of the plants might find only a fraction of its present market after the war.

The curve of industrial production has been following the curve of Government spending since 1929. Now, with the exploits of our "Young Salesman" on the Shipshaw deal (sounds a good deal like a raw deal), this relationship of private production to public spending enters a new phase. The Government now supports and extends the financial operations of private enterprise. The profits go to private business, but the cost is borne by the general public. Does this sound like "free enterprise?" Free from what? The only thing we can figure out is that it is free from any obligation to the public which nourishes it.

In the closing chapter of our story we must introduce the "Innocent Bystander Who Got Hurt in the Melee." This part is not so humorous nor inspiring. America is engaged in a war to the finish against fascism. This war grows more serious monthly. The dislocation of our national economy produced by a million and

one big and petty Shipshaw deals, pulled off by Big Hearted Uncle's million and one chiseling nephews proceeds with greater acceleration. While the Government is passing the platter to private corporations with one hand, it is restricting publicly owned power projects in the United States with the other hand. Under the guise of priorities and scarcities work has been suspended on 650,000 horse power of additional capacity on the TVA, work has been stopped on 480,000 horsepower at Grand Coulee, the Central Valley Project in California has been curtailed, and the Colorado Big Thompson project has been restricted.

This is the "Innocent Bystander" who is getting hurt and he is none other than us, *ALL* of us. America needs all the power it can get. This is no time to enforce scarcity on one side of the border and bribe corporate enterprise to produce an abundance on the other. America must be defended and preserved as a whole or it will be lost as a whole. There is no point in casting blame or calling names. The factual evidence does it well enough. It is plain to see that our "Young Salesman" and his million and one chiseling relatives are in immediate danger of overreaching themselves. From the heights of business acumen to the depths of anti-social behavior, it is only one short step. It has been said that Shylock died in Venice, dishonored. But, today, a million and one Shylocks fatten in ease and luxury while American boys die in foreign foxholes.

America approaches its forthcoming

ing rendezvous with destiny in trepidation, befouled with more public and private lice than any nation in history. The trend of world events rolls on relentlessly. When the history of the near future is written, how will it read? Will it say that our still smoldering pioneer tradition became renescent or sputtered out in absolute futility?

The only way we can prevent this story from ending in complete, stark

tragedy for all concerned is to point out the remedy for this insidious form of "chiselitis" which is rapidly paralyzing America. This is Technocracy's Victory Program of Total Conscriptio[n] of Men, Machines, Material and Money with National Service from All and Profits to None.

Where will "The Young Salesman" be then? Well, sir, he'll be on the same level as the rest of us, All for One and One for All.

Just Beyond The Horizon

"There is a new world in the making which is only vaguely perceived. Already scientific invention has tele-scoped time and space. Radio voices circle the globe. The motion picture whisks multitudes on its magic carpet to wide adventure. . . . But all this is merely the beginning. The world is waiting to yield up untold riches at the touch of science and technology. By overcoming the remnants of the savagery and by surmounting ineptness in social organization, this new world is obtainable.

"If we can look the facts in the face and not deny what we do not like . . . if we think more in terms of the present and future and less in terms of the past; if we can show inventive ability in social and industrial arrangements equal to that developed in technological advancement, if we can do all these things, then we can realize the promises of modern life and of American life more fully than even the prophets

have ever dared to dream."—Prof. Charles E. Merriam, of University of Chicago, in the *Chicago Herald-American*.

"It is imperative that industry and those engaged in industry be guided entirely and exclusively by intrinsic facts and intrinsic laws. . . . It is imperative to abolish the arbitrary will of persons from industrial life and to establish the rule of industrial science."—Jan., 1920. Howard Scott, Director-in-Chief Technocracy Inc.

"There are no pains too great for mankind to take to avoid the trouble of thinking."—Thomas Edison.

"Since all workers cannot be craftsmen, it is better to let the machine do the job," he said, describing gage inspection methods—quoting Carlton G. Nelson, an engineer, in December, 1942, *Western Machinery and Steel Works Magazine*.

Bloody Fight Faces Drive on Kiska

by Keith Wheeler

Reprinted by permission from the Chicago Daily Times, April 16, 1943

'The heavy veil of censorship is lifted again today to permit another dispatch from The Times correspondent with the U. S. Fleet in the North Pacific. Today's dispatch discloses what America is up against in blasting the Japs from the mist-shrouded, rockbound Kiska.'

BY COURIER from the Aleutians, April 3.—The bombardiers, who have watched the place grow, know that a lot of blood will be spilled if ever we go in to claw the Japs out of Kiska Island.

For—contrary to a quaint notion somehow given credence in the U.S.—the Japs have built one Corregidor between the Pacific and the Bering and are now diligently digging another at Attu to backstop the first.

The bombardiers know, for every day they have to fight through the hot wall of anti-aircraft over Kiska, and men who know say that Kiska's AA barrage is one of the world's hottest. The bombardiers know, for every week they watch Kiska burgeon and grow stronger—grow heartbreakingly stronger for it costs every man courage and some their lives to haul the bombs that fail, somehow, to halt Kiska's growth.

Kiska Heavily Fortified

If you are one of those who believe

that Kiska is occupied only by a few dozen starving Japs who can be rooted out anytime by a Boy Scout with a rowboat and an air rifle, then consider the hard facts seen from the bombers.

Kiska is a fortress, a major bulwark in the outer ring of the Jap empire's defenses. From the volcano to the remodeled shores of Kiska harbor and on to Cape St. Stephen, Kiska Island is 100 square miles of planned, intrenched, close-knit, heavily armed fortification for defense—and soon for offense as well.

The occupation last June began in the harbor proper, but clearly defined defense areas have since grown up on North and South Heads, around Gertrude Cove in the southern shore, at Vega Point and St. Stephen in the southwestern arm, opposite the harbor in the Conqueror Point area, in the lake region south of the volcano and around the shores of Salmon Lagoon above the harbor.

Salmon Lagoon is the latest development and what the Japs are building there bodes trouble for American bases and the bombers flying the Kiska shuttle. The Japs have never had a land based air force in the Aleutians, having depended until now on float mounted Zeros, Nakajima observation planes, Aichi scout bombers and Kawawishi patrol sea-planes which dared not attack the

mass flights of American bombers.

Airfield Nearly Ready

But two months ago the Japs began to build an airfield on the high ground just south of the lagoon. They have built slowly—American engineers tackling a similar project do it in two weeks or less—but now the field is nearly ready for use. It will be large enough to accommodate fighters and light bombers, including carrier-type dive bombers.

The slowly growing field has been bombed from time to time, but bombing can only delay, not interrupt the building of an airport. A bulldozer can push the dirt back into the biggest bomb hole in an hour's work.

There's no telling yet what completion of the field may mean to American forces in the Aleutians. Possibly the Japs will start a bombing campaign of their own or perhaps they'll use it only for fighters to defend Kiska.

Boat Landings on Beach

The focus of all activities on Kiska is the harbor. There are located the long submarine base shed with its marine railway, handling cranes, auxiliary sheds and workshops and fuel depots. The sub base lies in the southwestern curve of the harbor shore.

The most prominent feature in the northwestern quadrant was, for a while, the twin seaplane hangars. A thousand-pound bomb went through the roof of one and reduced their prominence by half. Also on the

beach are small boat landings where lighters can come in from supply ships. For some reason the Japs never have built ship docks and handle all their cargos with lighters.

The beach holds something else, a trench system laid almost at the water's edge. If Americans ever reach that beach they'll be fighting before they get out of the water.

Behind the hangars on ground rising to a low saddle in the island's backbone is the main camp area, an amazing development. It contains more than 150 permanent buildings, all solidly constructed, widely dispersed so that no one bomb can get more than one building, and each deeply sunk behind earth or sandbag revetments.

The buildings vary in size and appearance and probably are the usual run of military buildings—barracks, offices, warehouses, power stations, communications centers, mess halls.

Hundreds of Fox-Holes

The Japs have been bombed so much that they no longer trust the roomy revetments around a building. The area is literally pockmarked with hundreds of private foxholes.

The camp area is cross-hatched with streets and roadways and laced by power, light and communications lines on poles. There are widely dispersed supply dumps, boneyards full of wrecked float planes and transport pools filled with trucks and autos and engineering machinery.

Radio masts rise here and there about the area and radio aircraft detector stations stand baldly on the

hills. There is even a railroad, a short, narrow gauge line in the camp area.

Everywhere in the area are burned out shells of targets blasted by bombs, but destruction has never kept up with construction. Like every target area on Kiska, the camp area literally seethes with anti-aircraft emplacements. The Japs have everything—from 7.7 machine guns on up through pom poms to weapons as large as 90 millimeters or bigger. Moreover they have skilled gunners—they've had plenty of practice. And they never spare the ammunition.

The upper and lower harbor shores are enclosed by two horns of rock called North and South Heads. Both bristle with guns, including some big stuff of the coastal defense variety.

Cove for Heavy Ships

Southward across the ridge is Gertrude Cove, Kiska's secondary harbor. The cove is large enough and deep enough to accommodate heavy ships. Testimony to that is the 10,000-tonner beached there months ago after our bombers blasted it.

There are three other derelicts beached in the island's harbors, all victims of American attacks. The Japs still get some use out of them, use them to mother fleets of small boats for flak ships, and possibly for power stations.

The Gertrude Cove area is built up on a scale comparable to the main harbor area. There are buildings, tents, roads and dozens of anti-aircraft weapons.

A well-planned system of roads

links all parts of the island. Some lead toward Vega Point and St. Stephen where the tundra hills are scarred with trenchworks, outposts, communications lines and means for rapid artillery movement and emplacement.

Around Conqueror Point, across the narrow island from the harbor, is another highly developed defense area of trenches near the beach and land batteries backing up the trenches. Kiska, unlike Singapore, will not be caught with all its guns pointing the wrong way.

Bombers See Work Grow

Kiska's development has been an absorbing study for the bombers who fly there every faintly conceivable day to observe the progress and hinder it with bombs.

Occasionally they have watched the beginnings of puzzling installations, watched the work grow day by day and then, suddenly, found that it has vanished. The disappearing buildings were chambers built in a fashion peculiarly Japanese and peculiarly fitted to the Aleutian terrain.

First an excavation would appear. Next a conical tepee-like framework of bamboo poles would grow within it. The framework would be covered, probably with canvas. Then the whole works would vanish. The very camouflage-minded Japs would simply build a hill over the tepee.

Not all Kiska installations are warlike. On the rising ground above the camp is a man-made amphitheater ascended by two flights of stairs. Be-

tween the first level and the second is something that looks like a sway-backed archway. Experts on Japan say the thing is a shrine and that the swaybacked arch is a "torii." A worshipper enters the gate, pauses there to wash his hands and theoret-

ically to cleanse his soul. Beyond the gate he leaves gifts on an altar and communes with the spirits of his dead ancestors—while the big bombers overhead try diligently to make a dead ancestor out of him.

Alcan Highway—Technological Road to Victory

by R. B. Langan

IN 1898 Alaska had a big boom caused by the discovery of gold. In 1943 Alaska is in a bigger boom caused by this war against fascism. In 1898 transportation was by dog teams. Today it is by railroad, truck and airplane. The energy used then was derived from muscles, both human and canine. Today the energy used is derived mainly from coal and oil.

From a wild, free land, the Mecca of adventurers and fugitives beyond the pale of the law, Alaska has grown into a modern State. Coincident with the rapid rise of technology in the third phase of the industrial revolution here in the United States, Alaska has grown from the status of a stepchild of Uncle Sam to be, in the words of Brigadier General William Mitchell, "the most important strategic place in the world."

History Review

Alaska was discovered in 1741 by

The seven wonders of the ancient world, the great wall of China, and the Panama Canal rank as the world's greatest construction projects of the past. Now comes the Alcan Highway, another topnotch tribute to American technology.

Vitus Behring, a Danish explorer, in the service of Russia. He was commissioned by the Empress Catherine in 1728 to conduct an expedition, originally planned by Peter the Great, to determine whether Asia and America were united. In 1741 he touched upon the American coast. Returning he was shipwrecked upon an island, since named for him; here he and most of his crew perished.

By 1772 many small Russian trading companies were established, ranging as far to the south as California. In 1779 Emperor Paul the Eighth granted all trading rights in the territory to one Russian company.

In 1867 Alaska passed to the United States for a consideration of \$7,200,000. This deal was effected by W. Henry Seward, Secretary of State in Lincoln's cabinet. At the time it was widely condemned and was called "Seward's Folly." Alaska was considered to be a land of perpetual ice and snow, a frozen wilderness and unfit for human habitation. The late Judge James Wickersham, who was intimately acquainted with Alaska, said once: "In the territory of Alaska there is more coal than there is in Pennsylvania, Ohio and West Virginia, more gold than in California and Colorado, more agricultural land than in Sweden, Norway and Finland, and there is more fish than in all the balance of American waters put together." This was "Seward's Folly."

The population of Alaska is 72,000, of which one-half are white, one-quarter Indians, and one-quarter Eskimos. This is less than one-tenth of a person to a square mile. The area is 586,000 square miles, or about twice the size of the State of Texas. It has a coast line of 26,000 miles. From 1867 to 1884 Alaska had no government whatsoever. As the saying went, there was "no law of God or man north of 53°." In 1884 Alaska was put under the jurisdiction of the Federal District Court. In 1912 a territorial form of government was granted. In 1914 Congress passed an act authorizing a government railroad from Seward to Fairbanks. Since 1867 Alaska has been virtually an island, for there were no land routes to it. Everything was hauled by sea.

There was a railroad in Alaska, but no railroad to it.

Alaska Grows Up

In the early part of this century E. H. Harriman, the railroad magnate, visioned an overland railroad from the United States through Canada and Alaska into Siberia, tunneling under the Bering Straits, connecting Russia and North America. Since the earliest times Alaskans have dreamed of a railroad to Alaska from the United States.

During the years following the first Alaskan boom several proposed highways to Alaska were suggested. In 1940 the International Highway Commission recommended a road. But nothing was done about any of these proposals.

In November 1940, *thirteen months before Pearl Harbor*, Howard Scott wrote the following in A-20 Magazine of Technocracy Inc.:

"An Alaskan highway is being footballed around as a possible project, but all the Alaskan highways proposed so far run north out of Hazelton or Prince George, B. C., through the difficult terrain of the B. C., Yukon and Alaskan territory. Neither the Canadian nor the United States *outside* Alaskan highway proposals disclose that the only road connecting Vancouver with Prince George is via the Fraser River Canyon. This road is a single-track trail on the side of a cliff along which it would be literally impossible to run our giant diesel truck-trailer combinations; and yet this is the way that

our political schemers are proposing to provide a land connection with our far-off bases in Alaska.

"Technocracy proposes both an *inside* and an *outside* highway to Alaska. The inside highway would go north from Great Falls, Montana, through Lethbridge, Calgary, Edmonton, Peace River, and along the valley of the MacKenzie to the Arctic ocean, crossing westward from there along the valley of the Porcupine into the Yukon River Valley, thence south to Fairbanks and Anchorage. Another branch would run out to Nome and another to Bethel. The highway from Anchorage would continue out to the end of the Aleutian peninsula." (*See maps in Technocracy Magazine, A-20.*)

Long Haul or Short Haul

If you regard Seattle as the logical shipping point for Alaska, then the outside highway is the best, if you can overcome the Frazer River Canyon for that is the only road north out of Vancouver.

Seattle has been and is the natural shipping point for Alaska under conditions of *water* transportation, but under conditions of land transportation, it is just a big, unnecessary detour on the way to Alaska.

The production centers of the United States are in the East, not on the Pacific Coast. Why ship materiel 3,000 miles west and then turn north when you can go across country? This last factor makes the MacKenzie River route, proposed by Technocracy Inc., the best supply line to Alaska.

What's all the fuss about?

However, we are not concerned primarily with the merits or demerits of the various highways to Alaska. Technocracy urged both an inside and an outside highway in November 1940. The main thing right now is to get some kind of a passable road and to get it right away. The question may occur at this time: "Why all this concern about Alaska?" There are six good reasons:

(1) America is at war against the Axis conspiracy of fascism;

(2) The Aleutian Islands, a chain of 80 islands, South and West of Alaska, extend to within 800 miles of Japan's Kurile Islands, and Attu is only 765 miles from Paramushiro Air and Naval Base;

(3) The Aleutian Islands are a gangplank from Japan to America;

(4) Alaska has a coastline of 26,000 miles and a population of only 1/10 of a person per square mile;

(5) Alaska, although a part of North America is in effect a large island because it can be supplied only by water; and

(6) Were it attacked, it would be difficult to defend by water, for when it's a case of ships versus air power, the ships always lose.

However, this situation works both ways. If Alaska is an open door to America, it is also an open door to Asia. It is the greatest offense base on the Pacific Coast. Brigadier

General William Mitchell before the House Military Affairs Committee eight years ago said: "Alaska is the most important strategic place in the world. He who holds Alaska holds the world." Billy Mitchell was ridiculed and cashiered from the army. But he foresaw the rise of air power, which makes Alaska of such tremendous military importance to America. That is why we *must* have two highways to Alaska.

The Great Circle, or short air route, from Chicago to Tokio passes over the Yukon valley. Mitchell thought of Alaska as a great offensive base for air power which could crush Japan. Aircraft based in Alaska can reach far into three continents, Europe, Asia and North America, even with the limited range and carrying capacity of today's planes as compared with Technology's Flying Wing. The tradition minded Navy and Army leaders did not attach much value to Alaska as an offense base. Three naval bases and air fields were begun in 1939, but it was taken for granted that all necessary supplies could be carried by sea. In August 1940, Secretary Stimson declared that the value of a highway to Alaska was "negligible." By October 1941, he went so far as to admit that it might be desirable as a long-range defense measure but said it should have a low priority rating. The Canadian authorities were no more far-sighted. Up to late 1941 they still agreed with the United States War Department.

Now they are both exposed as

shortsighted and forced to eat their own words. Every naval ship and every foot of cargo space has become precious. Ships moving across the Gulf of Alaska are exposed to attack and Alaska itself may be invaded to prevent its use as a military base. It takes nine days to go by boat from Seattle to Anchorage and another day by train to Fairbanks. Trucks could haul loads along an inside highway from Edmonton to Fairbanks in 80 hours.

Now, one overland supply route has been built at top speed. Already Kiska island has been lost by default and is being prepared as a base from which to bomb our Northwestern cities and factories. How do you like that for a demonstration of the political-financial method of operations applied to National problems?

Let's hope the Alcan highway didn't come too late.

Technology Saves the Day

In spite of our collective lack of foresight in regard to the importance of Alaska, in spite of political and financial interference, a road to Alaska *has been finished*. This is what is important. Though the road is now only a rough 12-foot-wide supply line it will be broadened to a standard 24-foot graded highway. After it has been subjected to a season's traffic, it will be hard surfaced.

According to A. C. Clark, Principal Highway Engineer, U. S. Public Roads Administration, in an article in the *Pacific Builder and Engineer* for March 1943, the design problems involved in the Alcan high-

way "varied from those ordinarily found in the States, to problems peculiar to the Far North."

In places the road crosses muskeg swamps varying in depth from 1 foot to 26 feet. This involved excavating all the unstable soil and backfilling with selected material. Drainage problems in the mountainous sections are difficult due to spring thaws and the action of glaciers.

U. S. Army Engineer troops cleared the pioneer road. Behind them came a group of 54 contractors under the direction of the Public Roads Administration. Work was started early in 1942 and the road was formally opened to through traffic along its 1,681 mile length in November

1942. This colossal engineering feat is an everlasting tribute to American technology and the scientific method applied to social and national problems.

Technocracy desires to salute all those who participated in building the Alcan highway. The political and financial muddling and interference will soon be forgotten but the highway will remain as a vital link between the States and our far-off bases in Alaska.

At about the time in 1940 when Secretary Stimson said the value of an Alaskan highway was "negligible" Technocracy was demanding two Alaskan highways. But, of course, according to the Press, we hadn't been "reborn" then.

Thomas H. MacDonald, Chief of the Public Roads Administration, said that in these times when little is known of what monetary values will be in the future, it is important to deal in units of *work* such as man-hours, rather than in dollars, so that changes in monetary values will not distort the record.—Quoted in December, 1941 *Engineering News-Record Magazine*.

But man-hours are a declining quantity. Mr. MacDonald, you wouldn't want to tie America to something that was on the way out, would you?

"We are getting to a point where beliefs and opinions are having less and less effect on the world's activ-

ities, but where *technological* progress and the great increase of technical departments in government and business are beginning to impress even the public with the fact that *knowledge rather than belief* is needed to make the world go round. The motor car, as it has been in the past, will be one of those things which will lead us farther and farther into this technological age where the job rules, where results count."—William B. Stout, Industrial Designer, in "*Petroleum World*," Jan., 1943.

"The scientists, technologists, and engineers of this Continent are the general staff of America, whether they like it or not."—Dec., 1938.

Oil for What Castles In Spain?

by R. F. Novalis

When we started collecting data on the peculiar business of selling oil, the life-blood of technological warfare, to the world's leading non-belligerent fascist nation, Spain, the facts seemed to speak out for themselves. Here they are:

1. A total of 1,942,000 barrels (each containing 42 gallons) of U. S. oil have been exported to Spain in the years 1941 and 1942 (*Oil and Gas Journal*, March 18, 1943). This is an infinitesimal part of American production but rates big in Spain.

2. When he announced on February 26 of this year from Barcelona that Venezuelan oil was going to Spain in Spanish tankers, our ambassador, Carlton J. H. Hayes, admitted (according to the Associated Press) that six oil tankers had cleared Spanish ports for the U. S. (not Venezuela) in December. Now it's obvious that Spain isn't shipping *us* any oil, so the tankers must have been sent here for American oil too.

3. Sure enough, the next news was found in the *New York News* on April 24 of this year: "More than 200,000 gallons of high-grade petroleum products have been shipped to Spain from the port of Philadelphia within the last week aboard Spanish and Portuguese ships. The oil, which came from Texas by tank car, is being supplied by . . . a subsidiary of the Standard Oil Co. of New York . . . plainly stenciled 'Barcelona,' Spanish

port on the Mediterranean, 75 miles from Axis airports then used by planes battling against American and British troops in Tunisia."

4. The following International News Service dispatch was printed in the *Chicago Herald-American* on April 17 of this year:

German U-boats in the Caribbean are receiving fuel from Spanish ships, the newspaper *Ultimas Noticias* charged today. The paper alleged large quantities of petroleum also are being sent to Spain and thence to Germany.

5. A Senor Riega is quoted in *The Nation* of May 8 as saying in a broadcast from Venezuela:

"Three months ago, when I left Madrid, the gasoline that had gone to Spain was either delivered to the Axis or stored."

6. At home, the *American Freeman*, official Falangist propaganda bureau since 1938, has closed its New York office, the Library's director, Gaytan y Ayala, has transferred activities to the Spanish Embassy at Washington as a "press attache." *Espana Nueva* (Spanish-language newspaper printed in U. S.) informs its readers that for only 30 cents a half-ounce, they may communicate by *air mail* with Germany, Italy, and occupied France as well as with Spain.

Think that one over before going on to the next item.

7. You might be interested in knowing, from its own statements, what has been going on in this country of Spain now that the rest of the world is at war on two sides.

Last December, General Franco, head of the government, spoke to the Falange National Council, central body of the state party (according to a December 8 Associated Press dispatch) which, it was announced, will settle "the problem of Spain's international policy."

What is Spain's international policy? Well, *The Nation* quotes the following heard recently from native radio stations:

"We must be ready for the future, when Spain's imperial routes will unfold under our

eyes as a tangible reality. . . ." Barcelona station.

"In time of peace we must prepare for war." Seville station.

"Spain is a nation in readiness for combat." Barcelona station.

Finally, Thomas J. Hamilton, in his new book, "Appeasement's Child" quotes the Falange as saying: "We have a will to empire. We will not put up with. . . foreign interference. With regard to the Hispano-American countries, we will aim at unification of culture, of economic interests, and of Power."

Colonel Juan Beigbeder, former Foreign Minister of Spain, interestingly enough, is now the Spanish military observer in the United States army.

"Secretary Jesse Jones (of the Dept. of Commerce) has ready answers to questions regarding his opinion of the American system of free enterprise and the conflicting theories of the economy of abundance and the economy of scarcity. He said he favors free enterprise and abundance."—Quoted in *Chicago Tribune*, April 14, 1942.

"The fundamental objective of industrial research is the insurance of the continued existence of a business and the maintenance of its profits. . ." —Roland P. Soule, in *Industrial Bulletin*, October, 1941.

"The American Union still has its bases in its own continent. From this results the unheard-of internal strength of this state."—Adolf Hitler, in *Mein Kampf*.

"Patents are the keys to our technology, technology is the key to production, and production is the key to victory."—President Roosevelt, April 13, 1942.

"It is for America to abandon the ground on which hitherto the history of the world has developed itself." —Napoleon Bonaparte.

A Primer of Technocracy

by Education Division 8741-1

Science Invades the Social Field

TECHNOCRACY began in 1919 as a research group called the Technical Alliance of North America. It was organized by eminent scientists, engineers and educators, to make a survey of social and industrial facts in America. Its object was to analyze the basic factors operating in American civilization. This was for the purpose of establishing the relationship existing between the rise of science, with its consequent impact of power and technology upon the social order, and the status of the general welfare of the people. The primary aim was to determine the feasibility of applying scientific methods and principles to the solution of social problems.

This survey continued for 14 years, using as its means of investigation government statistics, business records and the reports of trade associations, reaching back for a period of 100 years. A vast amount of factual data was collected and classified. This material when correlated with previously established scientific knowledge became the solid foundation upon which Technocracy is built. In 1933 the Technical Alliance of North America was reorganized as Technocracy Inc. It then took the form of a membership organization engaged in dynamic educational activities and further research. Its studies of American problems began

24 years ago and are still continuing. The body of thought called "Technocracy" consists of a non-political, scientific, social program for America. It has two aspects, its analysis and synthesis. The analysis is the separation of the fundamental characteristics of American civilization into their component basic elements. This breakdown illuminates the setup which determines the rules of the game of the Price System under which we live, and reveals the reasons for its low operating efficiency.

The synthesis consists of the design of a modernized system of production and distribution adequate to meet the needs of all the people all the time. This inevitable, next most probable American social system will be based upon the technological character of American civilization and the geographical and geological conditions of the North American Continent. It will realize the best historical ideals of America.

A New Kind of Social Movement

Technocracy Inc. is non-political, non-profit and non-sectarian. It is a patriotic organization "Made in the U.S.A." and is not affiliated with any other organization in the world. It is diametrically opposite and opposed to communism, socialism, nazism, fascism and all other political ideologies. The widespread activities of the organization are conducted on a

purely voluntary basis. Its membership is a composite of all the occupations, economic levels, races and religions in America. It is not a pressure group. Neither is it secret, subversive or revolutionary. It is not organizing to overthrow the Government and has no plans for assuming power to put its program into effect.

Social change is not brought about by agitation or exercise of the intellect, but comes as a result of the pressure of physical events. The power behind the program of Technocracy is the potency of the underlying physical factors which are turning American civilization upside down and inside out. Technocracy's sole function is to illustrate these trends and point out their inevitable end results. When the coming social change is completed, Technocracy Inc. will be disbanded. Today Technocracy occupies a unique position. It is recognized as the best informed organization in America with no axe of its own to grind. It is an accurate cross-section of the population, and since its analysis and synthesis affects the entire population equally without special consideration for any individuals or minority groups, it can be said with authority that Technocracy speaks for the common and higher interests of *all* American citizens.

Right or Wrong — My Country.

Technocracy is the only social movement with an American background that has become widespread in America. It has never been pacifist or isolationist. The defense and security of America has always been

an integral part of Technocracy's analysis and design. Its internal social program has always been essentially an effort to arouse a new and higher form of patriotism for the future of this country. However, America's pressing need today is for an immediate patriotism to defend and preserve the great technology of America. No nation can accomplish social advance in its internal economy unless it is secure against aggression from the outside.

Technocracy realized this in 1935. At that time it analyzed the rise of European and Asiatic fascism and registered a protest against the shipment of materials to Japan. In 1938 Technocracy analyzed the nature of modern warfare and called for a complete reorganization of the Army, Navy and Air Force along technological lines. Technocracy Inc. has been the initiator and leading organization in America campaigning against the fascist-type salute in schools for the last several years. In November, 1940, Howard Scott wrote these words: "Externally the need for protection in the immediate present exceeds in urgency the need for solving our internal problems." That was the keynote of Technocracy 13 months before the Japanese bombed Pearl Harbor and that is the basis of its program today.

"Any man more right than his neighbors constitutes a majority of one."—Thoreau.

In a lousy environment, only a louse is fitted to survive.

Technology Marches On!

by Research Division 8741-1

More With Less

ONE of the high priests of fascism, Goebbels, pointed with the usual politician's pride just a year ago to the fact that the United States had 10,000 fewer locomotives and 500,000 less freight cars than in 1917 in World War I. He thought that would doom us.

In recent months Price System publicists have been busy in magazines and newspapers with comparisons of 1918 and last year—1942:

Ton-miles of freight transported—	
1918	1942
405 billion	638 billion

But neither Dr. Joe or the publicist explained to the public that not only did we move 56 per cent more freight with a lot less equipment, but we did it with two-thirds of a million less men: 1918—1,891,500 and 1942—1,270,000.

And what was it that Goebbels didn't know about? American technology. In the past two years we have added 1,862 new Diesel and electric locomotives and 661 new steam engines.

Incidentally, America was able to move *more* freight on less miles last year:

U. S. miles main track built....	97
Canada miles main track built..	1
U. S. miles track abandoned....	2,516
Canada miles track abandoned..	23

The trend in producing more with

less equipment in America during wartime includes agriculture too. Wisconsin cheese factories numbered 2,800 ten years ago and only 1,740 last year; but the 1942 plants produced 500 million pounds of cheese compared to 300 million in 1922.

Canada, with 8,000,000 fewer acres than in 1940, produced its all-time peak crop of wheat last year, 615 million bushels. (Source: "Food Industries," November, 1942.)

Airlines of the United States, denied 50 per cent of their planes because of war needs, last year caught onto the American way of doing more with less by increasing their pound-mile transportation of airmail by 55 per cent, and carrying 2 per cent more passenger-miles. They carried more than twice as much air express, 40 million pounds, than the year before, when 19 million pounds were carried.

Manufacturing production in Canada the first two months of this year was 27 per cent larger than January-February of 1942, but factory employment increased only 10 per cent, according to an April report of the Bank of Montreal. The bank neglected to explain that the difference between those two figures was due mainly to *Technology*.

For every one ton of combat plane produced before Pearl Harbor by the

(eight) companies of the Aircraft War Production Council, 4 tons were being delivered in February of this year. This is an increase of 400 per cent. "Man-hours rose only 53 per cent," the Council states with rightful pride.

The American armed forces use an aircraft-detecting device which does in 5 seconds mathematics which would take 45 man-hours to figure out!

A new method of broach-rifling a machine gun barrel at the Rock Island (Ill.) Arsenal, according to an April 28, Associated Press Dispatch, requires only four machines instead of the former 40, to turn out 1,300 barrels a day.

Blades for steam turbines to be installed in ships are made (according to Machine Tool Blue Book) at the Westinghouse South Philadelphia plant as follows:

"When the steel blank is fed into it, the (new) machine cuts 25 surfaces, bevels edges, and straightens edges, in one 10-second operation. machine does the work (formerly) performed by 4 others, and does it 5 times faster. The operator simply touches the button....The plant will have in operation a total of 10 broaching machines...."

"And then think that every hour this mill (at Worcester, Mass.) turns out about 173 miles of rod...."

—Advertisement of Morgan Construction Co. in Iron Age, March 11, 1943.

"Five men on this machine can do in 8 hours what formerly took 15 men to do in 3 shifts." The machine is a "robot" painter, at the Glenn Martin aircraft plant, which was made by De Vilbiss, well known as a manufacturer of women's perfume atomizers!

A Comparison of Bituminous Coal Produced in War Years

Year	Production in Tons	No. of Shipping Mines	No. of Employed	Output in Tons per Man per Day
1918	579,386,000	8,319	615,305	3.78
1942	585,000,000	6,500	453,000	5.25

Increase in production.....	5,614,000 tons
Decrease in number of mines.....	1,819
Decrease in number of men employed.....	162,305
Increase in daily output per man.....	1.47 tons

Are the Miners Better Off Than They Were in 1918

Report of U.M.W.A.—in *Chicago Daily News* (4-6-43)

Technocracy and Your Trade

by Publications Division 8741-1

TOTAL CONSCRIPTION AND LABOR

HOW does this program affect organized labor? The design places labor on an equal footing with all other citizens. Remember, no fascist nation has Total Conscription with National Service from All and Profits to None. They have conscription of men and women alone for the benefit of corporate enterprise. The authoritarian state does not conscript wealth, privilege and profits; it increases and extends them. Restrictions upon organized labor in the United States have been increasing lately. Indeed, the labor freeze is creeping across this Continent today like a new ice age.

The only antidote for this and the only protection for labor is Total Conscription. Unless labor adopts a protective offensive, it may find that its structure has suddenly become null and void with no compensating factors to take its place. Labor cannot fight reactionary proposals for conscription of labor alone unless it has a dynamic program for greater national cooperation by all!

We All Belong to the Same Class

In America there is no class struggle according to the Marxian formula based on European studies. The concept that physical wealth is produced by human toil and hand tools may have some validity in Europe. But in America, physical

wealth is produced chiefly by technological processes, and the use of extraneous energy. North America has 78 per cent of the world's installed horsepower of machinery and less than 10 per cent of the world's population. 98 per cent of all the power used in America today is derived from coal, oil, gas, wind or falling water; only two per cent is actual, human, physical labor power. Most of this labor is of a supervisory, assembly, or attendant nature to the machine itself. Even this two per cent is rapidly being decreased by automatic mechanisms controlled by photo-electric cells.

Studies by the Department of Labor show that organized labor is waging a losing battle. Increases in hourly wage rates have been more than offset by increases in output per man-hour since 1919. The application of extraneous energy and technological processes to industry means the employment of fewer and fewer man-hours of labor. This trend not only cancels out the gains of labor, but it will soon cancel out the profits of corporate enterprise as well. It is a unidirectional and irreversible process.

Technocracy views the "capital-labor" struggle as one of the numerous minority conflicts going on within the framework of the Price System.

A gain to one group must always be a loss to the other, or to the people collectively. On this Continent today, it is unnecessary for any minority to suffer in serving the majority, or vice versa. There is an abundance of goods and services available for all. The fact is we are all dependents of the industrial machine we have created. Social and economic stratification of classes has never existed in America. Whatever social classification there is in this country is in the ability to chisel. None of us *earn* our living. It is a physical impossibility for any man to create even a part of his standard of living today in America by his own individual, physical labor power. We are the favored heirs of all the long centuries of the slow advance of science that preceded us. We all belong to the same class, and we are all struggling, here in America, with the complex problems of a technological civilization.

Labor Has a Green Light

Technocracy has never made an attack on organized labor and is not taking an anti-labor position today. It is an educational organization and has its full quota of union men in its membership. Technocracy understands and has always agreed with the immediate objective of organized labor to maintain or increase its income. However, before any man is a union man, a "capitalist" or a Technocrat, he is a consumer and an American. The common and higher interests of all Americans in today's period of crisis demands the installa-

tion of Technocracy's program of Total Conscription of Men, Machines, Money and Materiel, with National Service from All and Profits to None.

Under this program most mechanics would have specialist ratings and many would have commissions. No executive or manager could receive more than a General in the Army, and no unskilled worker could receive less than a private. The scale of pay with food, clothing, housing, medical and dental allowances and no deductions for rent, interest, taxes or bonds would leave the great majority of workers better off than they are today.

It is not what we like, but what we *must* do if we do not want fascism to take over and suspend organized labor for good along with all our American civil rights so dearly paid for in the past. This is organized labor's chance to help solve America's problem and its own. It is neither fascist nor communist. It is the scientific way, the American way; One for All, and All for One!

In the midst of the greatest supply of food ever produced by any country, we sit in our homes, figuring out points and in some cases actually unbalancing our diets, due to a lack of design for distribution of this food. Total Conscription of all our resources, all our technology, all our vast knowledge of production, would measure the subsistence requirements of the nation in advance so that malnutrition will be eliminated.

TECHNOCRACY

WHAT?

WHERE?

WHEN?

WHO?

WHAT?

★ Technocracy is the only American social movement with an American program which has become widespread in America. It has no affiliation with any other organization, group or association either in America or elsewhere.

★ The basic unit of Technocracy is the chartered Section consisting of a minimum of 25 members and running up to several hundred.

★ It is not a commercial organization or a political party; it has no financial subsidy or endowment and has no debts. Technocracy is supported entirely by the dues and donations of its own members. The widespread membership activities of Technocracy are performed voluntarily; no royalties, commissions or bonuses are paid, and only a small full-time staff receives subsistence allowances. The annual dues are \$5.00 which are paid by the member to his local Section.

★ Members wear the chromium and vermillion insignia of Technocracy—the Monad, an ancient generic symbol signifying balance.

WHERE?

★ There are units and members of Technocracy in almost every State, and in addition there are members in Alaska, Hawaii, Panama, Puerto Rico and in numerous other places with the Armed Forces.

★ Members of Technocracy are glad to travel many miles to discuss Technocracy's Victory Program with any interested people and Continental Headquarters will be pleased to inform anyone of the location of the nearest Technocracy unit.

WHEN?

★ Technocracy originated in the winter of 1918-1919 when Howard Scott formed a group of scientists, engineers and economists that became known in 1920 as the Technical Alliance—a research organization. In 1930 the group was first known as Technocracy. In 1933 it was incorporated under the laws of the State of New York as a non-profit, non-political, non-sectarian membership organization. In 1934, Howard Scott, Director-in-Chief, made his first Continental lecture tour which laid the foundations of the present nation-wide membership organization. Since 1934 Technocracy has grown steadily without any spectacular spurts, revivals, collapses or rebirths. This is in spite of the fact that the press has generally 'held the lid' on Technocracy, until early in 1942 when it made the tremendous 'discovery' that Technocracy had been reborn suddenly full-fledged with all its members, headquarters, etc., in full swing!

WHO?

★ Technocracy was built in America by Americans. It is composed of American citizens of all walks of life. Technocracy's membership is a composite of all the occupations, economic levels, races and religions which make up this country. Membership is open only to American citizens. Aliens, Asiatics and politicians are not eligible. (By politicians is meant those holding elective political office or active office in any political party.)

★ Doctor, lawyer, storekeeper, farmer, mechanic, teacher, preacher or housewife—as long as you are a patriotic American—you are welcome in Technocracy.

**Great Lakes Technocrat,
306 W. Randolph Street
Chicago, Illinois**

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Total Conscription

Can America muddle through?

Must American affairs blunder along without coordinated national operation?

Must our efforts be sapped by the prerogatives of business, by labor officialdom, and by political expediency?

Do we not realize that politico-business-economic methods are incompetent in total war?

We conscript our fighters; why not all men and women? Our wealth? Our transport and communications? Our industries? Our mines? All means of production, distribution, and services?

Why should not all citizens serve on the same basis of pay as the Armed Forces?

Is this business or war? Why not suspend dividends, rents, profits, dues, and taxes?

TECHNOCRACY ASKS: Can America achieve a fighting morale and internal efficiency while some Americans gain wealth and economic advantage in war prices, war profits, war wages, and war racketeering, while other Americans give their lives?

Men, Machines, Materiel, Money!
National Service from All and Profits to None!